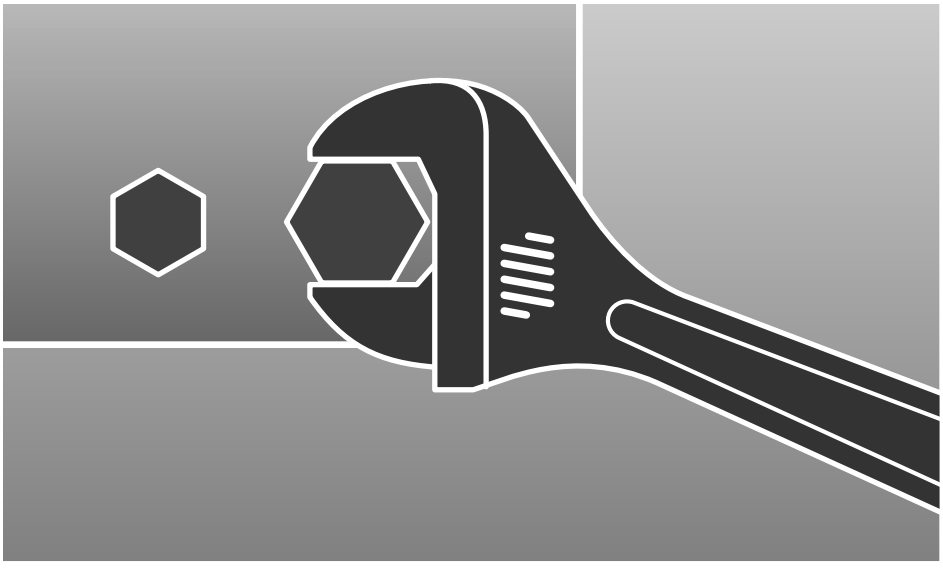
INSTALLATION MANUAL

EH052EAMC
EH070EAMC
DH094EAMC

ENGLISH
ESPAÑOL
FRANÇAIS
ITALIANO
PORTUGUÊS
DEUTSCH
ΕΛΛΗΝΙΚΑ
RUSSIAN

System Air Conditioner



ⒺⓈⒻⒾⓅⒹⒼⓇ DB98-27157A(1)

Safety Precautions

The following safety precautions must be taken when using your air conditioner.

WARNING

• Risk of electric shock Can cause injury or death. • Disconnect all remote electric power supplies before servicing, installing or cleaning. • This must be done by the manufacturer or its service agent or a similarqualified person in order to avoid a hazard.

INSTALLING THE UNIT

- The unit should not be installed by the user. Ask the dealer or authorized-company to install the units except room air conditioners for the U.S.A and Canada area.
- If the unit is installed improperly, water leakage, electric shock or fire may result.
- Mount with the lowest moving parts at least 2.5 m above the floor or grade level. (If applicable)
- The manufacturer does not assume responsibility for accidents or injury-caused by an incorrectly installed air conditioner. If you are unsure aboutin-stallation, contact an installation specialist.
- When installing the built-in type air conditioner, keep all electrical cablessuch as the power cable and the connection cord in pipe, ducts, cablechannels e.t.c to protect them against liquids, outside impacts and so on.
- This appliance is not accessible to the general public. This applianceshould be installed according to the provided installation instruction.

POWER SUPPLY LINE,FUSE OR CIRCUIT BREAKER

- If the power cord of this air conditioner is damaged, it must be replaced bythe manufacturer, its service agent or similarly qualified persons in order toavoid a hazard.
- The unit must be plugged into an independent circuit if applicable or connect the power cable to the auxiliary circuit breaker. An all pole disconnection from the power supply must be incorporated in the fixedwiring with a contact opening of >3mm.
- Do not use an extension cord with this product.
- If the unit is equipped with a power supply cord and a plug, the plug must-be accessible after installation.
- The air conditioner must be installed in accordance with national wiring regulations and safety regulations wherever applicable.

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Preparation for Installation

When deciding on the location of the air conditioner with the owner, the following restrictions must be taken into account.

General

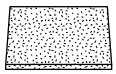
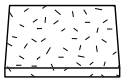
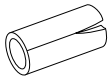
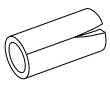
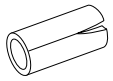
Do NOT install the air conditioner in a location where it will come into contact with the following elements:

- Combustible gases
- Saline air
- Machine oil
- Sulphide gas
- Special environmental conditions

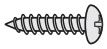
If you must install the unit in such conditions, first consult your dealer.

Accessories

- The following accessories are supplied with the indoor unit.
  The type and quantity may differ depending on the specifications.

Owner'sInstruc-tions(1)	Installation Manual(1)	Insulation Cover Pipe in(1)	Insulation Cover Pipe out(1) 
Insulation Drain (1) 	Insulation CoverDrain(1) 	Insulation Pipe in(1) 	Insulation Pipe out(1) 
Cable-Tie(8)	Flexible hose(1)	Clamp hose(2)	Rubber(8)

Wired Remote Controller Accessories

Wired remote controller	Cable-Tie	Cable Clamp	M4 x 16 Tapped Screws 
Indoor unit power draw-ing cable	Communication cable ofthe wired remote con-troller	Wire joint	Owner's Instruction
Installation Manual			

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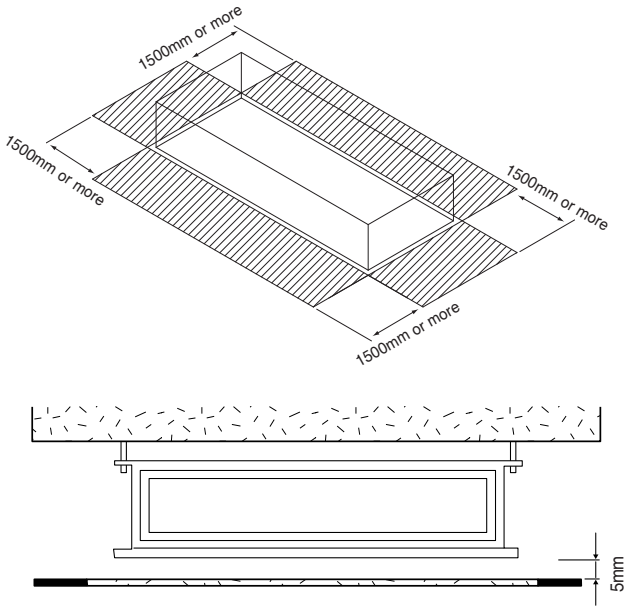
Deciding on Where to Install the Air Conditioner

Indoor Unit

- There must be no obstacles near the air inlet and outlet.
- Install the indoor unit on a ceiling that can support its weight.
- Maintain sufficient clearance around the indoor unit.
- Make sure that the water dripping from the drain hose runs away correctlyand safely.
- The indoor unit must be installed in this way, that they are out of publicaccess. (Not touchable by the users)
- After connecting a chamber, insulate the connection part between the indoorunit and the chamber with t10 or thicker insulation. Otherwise, there can beair leak or dew from the connection part.

Space Requirements for Indoor Unit



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Drawing of the indoor unit

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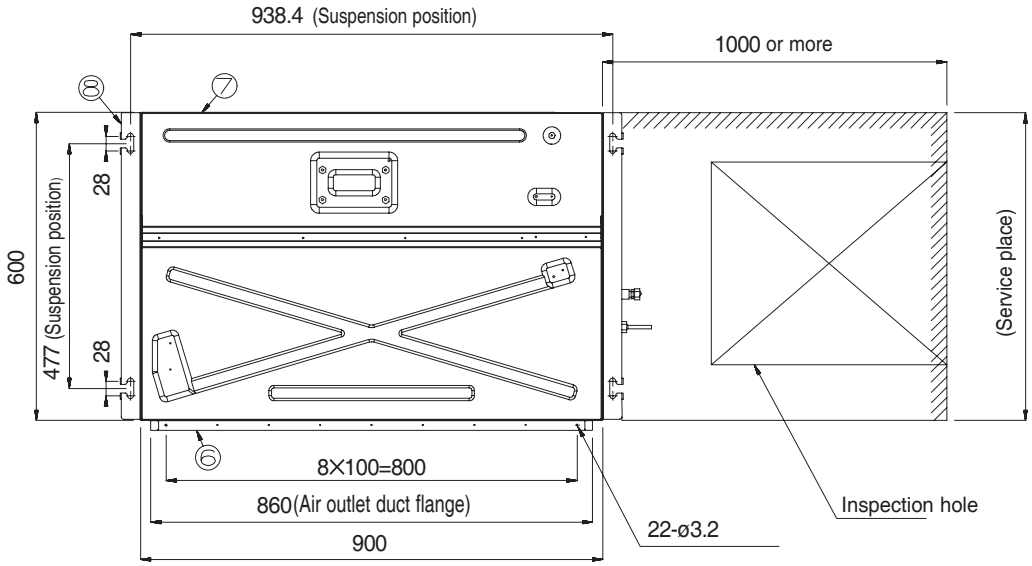
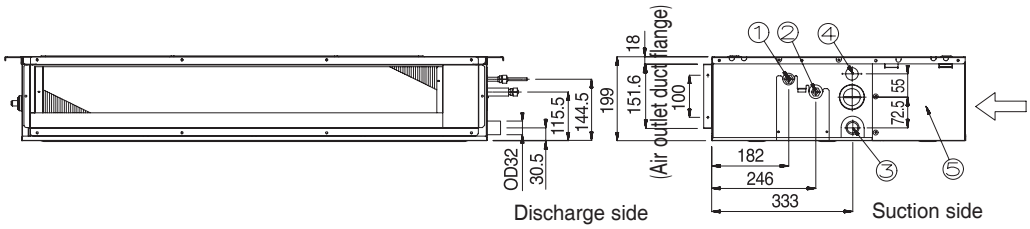
Unit : mm





Number	Name	Description
1	Liquid pipe connection	Ø6,35 Flare
2	RGas pipe connection	Ø12,7 Flare
3	Drain pipe connection	OD32 ID26
4	Drain pipe connection	Using drain pump (Optional)
5	Power supply connection	
6	Air discharge flange	
7	Air filter	
8	Hook	For M8~M10

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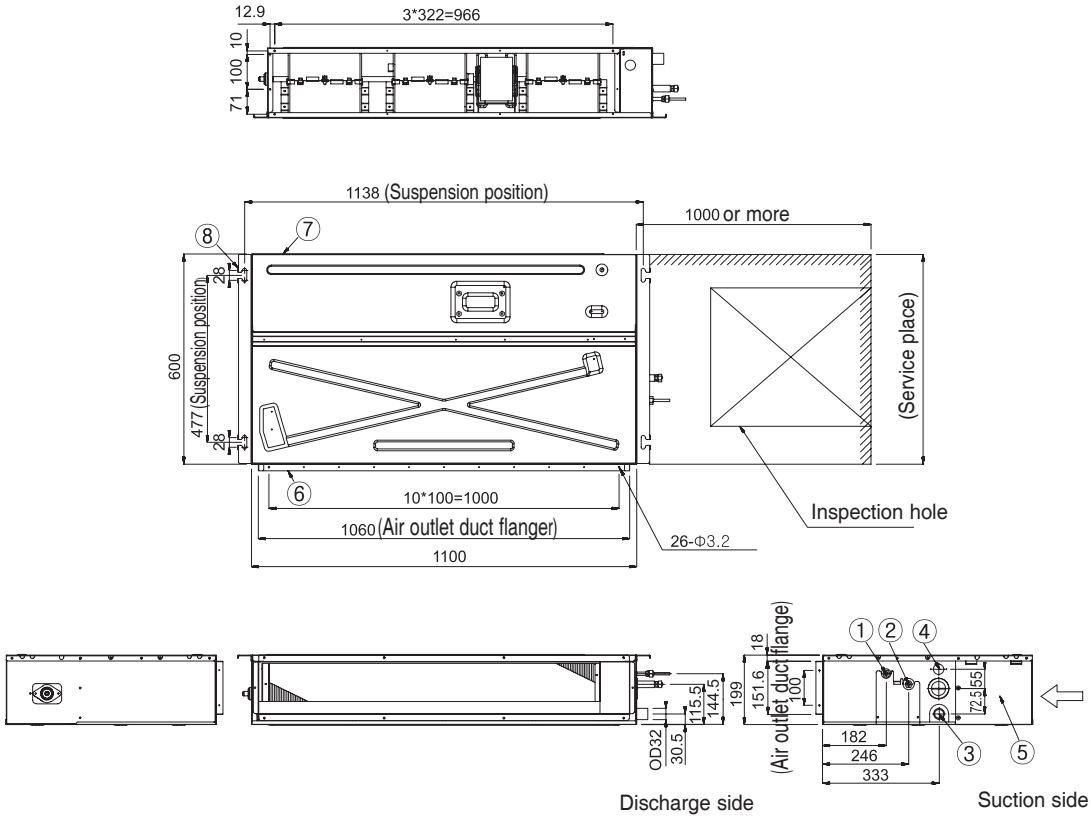
Unit : mm



Number	Name	Description
1	Liquid pipe connection	Ø9,52 Flare
2	RGas pipe connection	Ø15,88 Flare
3	Drain pipe connection	OD32 ID26
4	Drain pipe connection	Using drain pump (Optional)
5	Power supply connection	
6	Air discharge flange	
7	Air filter	
8	Hook	For M8~M10

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Deciding on where to install the Air Conditioner (Continued)

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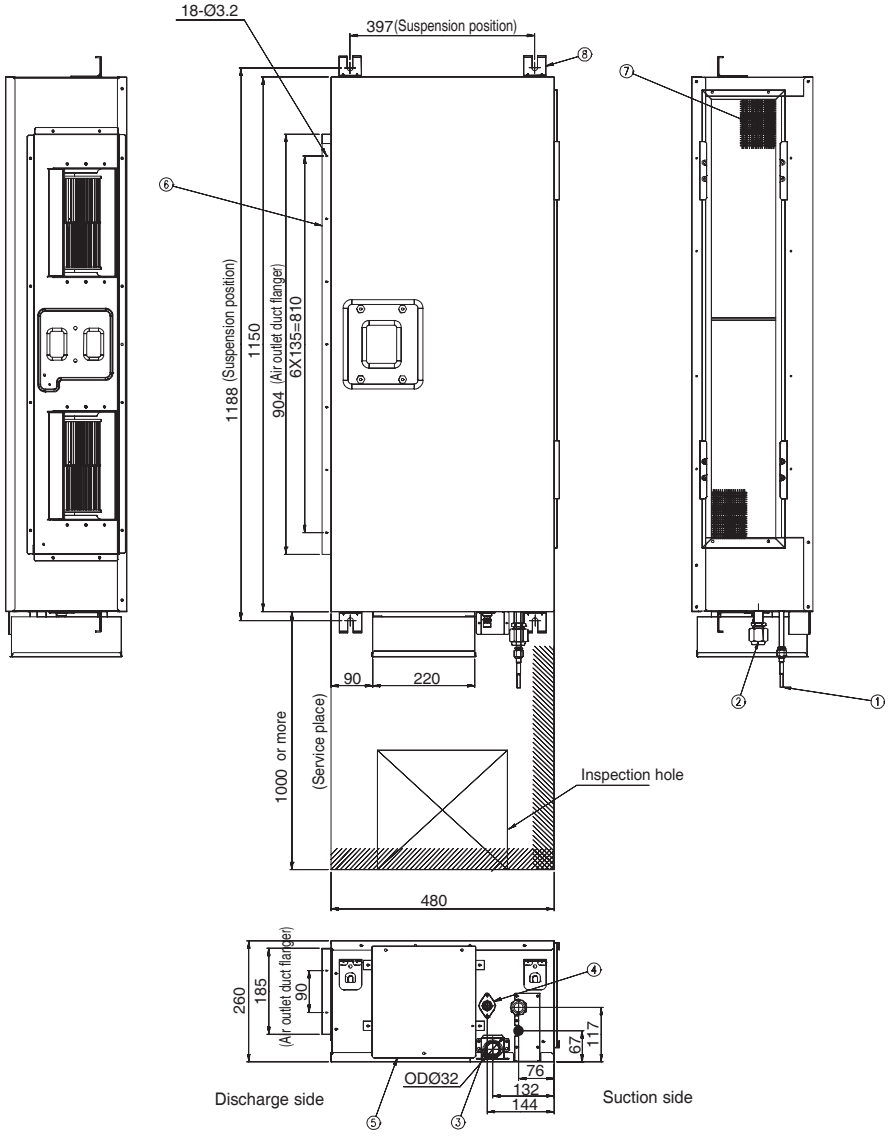
Unit : mm



Number	Name	Description
1	Liquid pipe connection	Ø9,52 Flare
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4	Drain pipe connection	Using drain pump (Optional)
5	Power supply connection	
6	Air discharge flange	
7	Air filter	
8	Hook	For M8~M10

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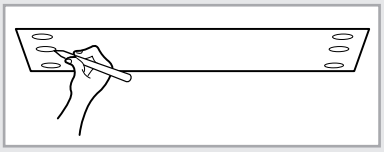
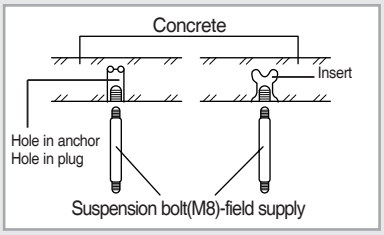
Indoor Unit Installation

1 Mark the place to insert the suspension bolt where you want to install theindoor unit.

Note ◆ Refer to page 6~8 for the dimension.

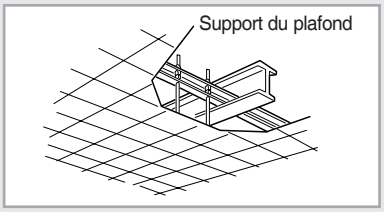


2 Insert bolt anchors. Use existing ceiling supports or construct a suitable-support as shown in figure.



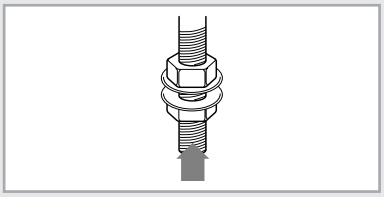
3 Install the suspension bolts depending on the ceiling type.

IMPORTANT **Ensure that the ceiling is strong enough to support the weight of the indoor unit.Before hanging the unit, test the strength of eachattached suspension bolt.**



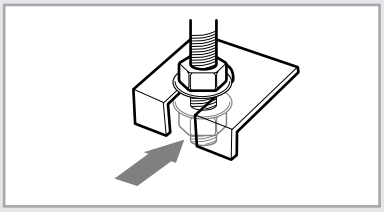
4 Screw eight nuts to the suspension bolts making space for hanging the indoor unit.

IMPORTANT **You must install the suspension bolts more than 4 when installing the indoor unit.**



5 Hang the indoor unit to the suspension bolts between two nuts.

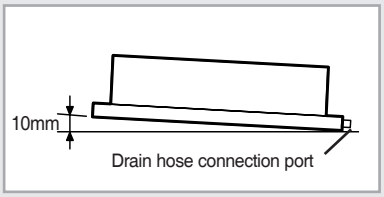
Note ◆ Tubing must be laid and connected inside the ceiling when suspending the unit. If the ceiling is already constructed, lay the tubing into position for connection to the unit before placing the unit inside the ceiling.



6 Screw the nuts to suspend the unit.

7 Adjust level of the unit by using measurement plate for all 4 sides.

Note ◆ For proper drainage of condensate, give a 10mm slant to the left or right side of the unit which will be connected with the drainhose, as shown in the figure. Make a tilt when you wish to install the drain pump, too.



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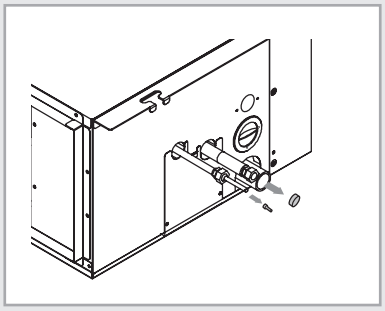
Purging the Unit



On delivery, the indoor unit is loaded with an inert nitrogen gas. All this gas must therefore be purged before connecting the assemblypiping. To purge the inert gas, proceed as follows.

Unscrew the caps at the end of each pipe.
Result:All inert gas escapes from the indoor unit.

Note

- To prevent dirt or foreign objects from getting into the pipes during installation, do NOTremove the caps completely until you are ready to connect the piping.

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Connecting the Connection Cord

The indoor unit is powered from the outdoor unit via the connection cord.

1 Remove the screw on the electrical component box and remove the cover plate.

2 Route the connection cord through the side of the indoor unit and connectthe cable to terminals as shown in page 12.

3 Route the other end of the cable to the outdoor unit through the ceiling &the hole on the wall.

4 Reassemble the electrical component box cover, carefully tightening the-screw.

Note

- When connecting the cables, you must pass them through the cable clamp to fix them securely.
- Connect the Connection Cord as seen in next picture , and the torque of screw is 40~70kgf•cm .

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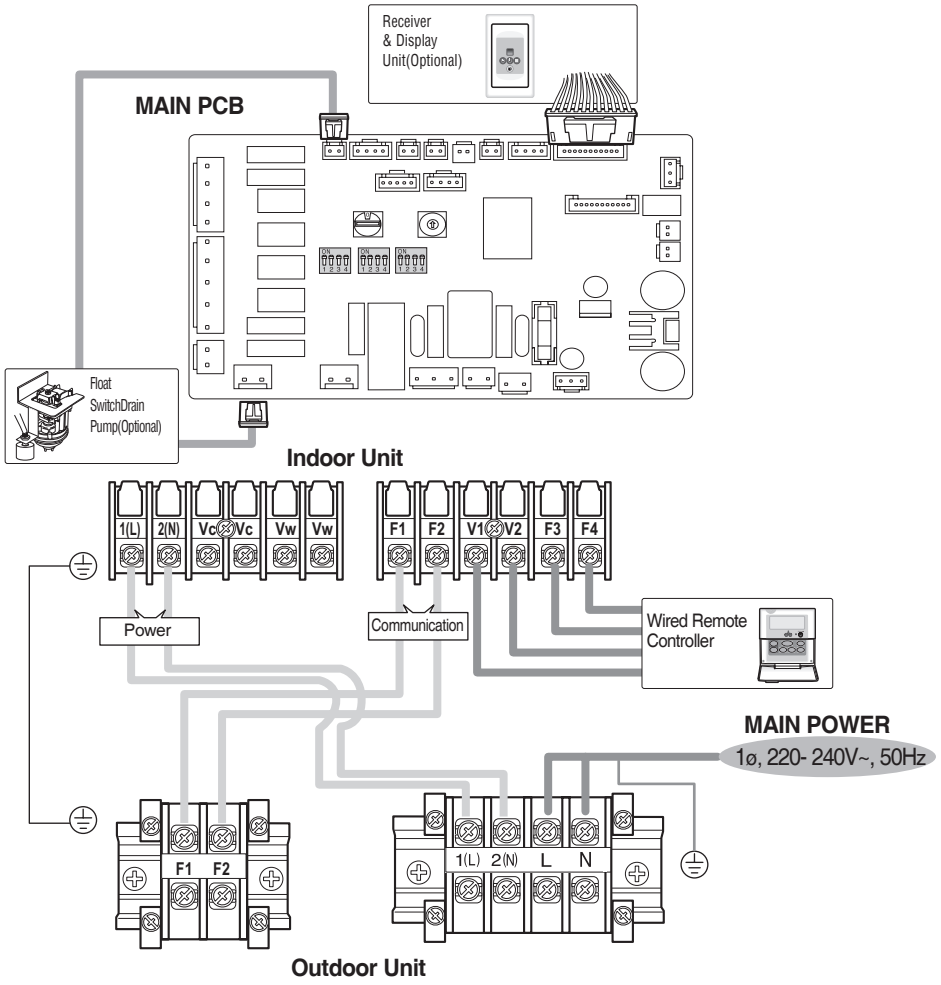
Connecting the Connection Cord(Continued)

Wiring Diagram



Cable Specifications

Single Phase						
Power supply	Max/Min(V)	MCCB	ELB	Power cable	length	Earth cable
220-240V~/50Hz	264/198	Trip:25A	25A	2.5mm,2wires	10m or less	Ø1.6mm,1wire

* The power cables are not supplied with the air conditioner.
* The power cables use the grade H07RN-F or H05RN-F materials.

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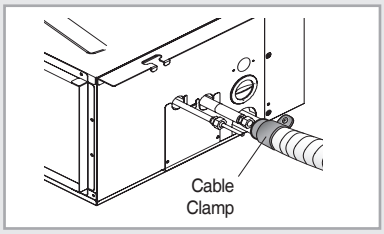
Drain Hose Installation

Care must be taken when installing the drain hose for the indoor unitto ensure that any condensate water is correctly drained outside. Thedrain hose can be installed to the right of the base pan.



1 Insert the flexible hose to the drain hose port.

Note

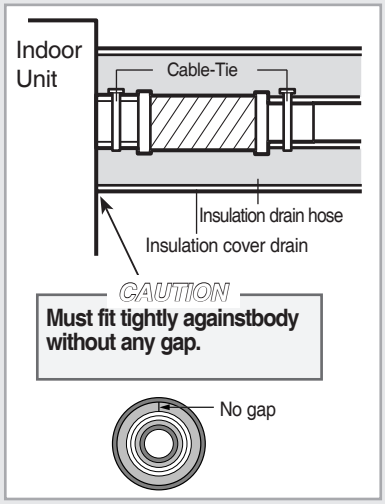
- Fix the flexible hose to the indoor unit with the supplied cableclamp securely.
  (Use the screwdriver to fix the flexible hose securely.)

2 Install the drain hose so that its length can be as short as possible.Internal diameter of the drain hose should be the same or slightly biggerthan the external diameter of the drain hose port.

- Inner diameter of the drain hose

Note

- Give a slightly slant to the drain hose for proper drainage of condensate.
- Fix the flexible hose to the PVC with the supplied cable tiesecurely.

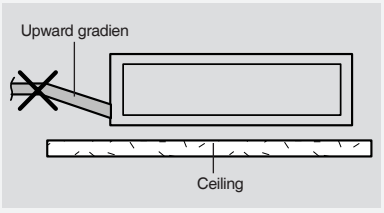


3 Wrap the drain hose with the insulation drain as shown in figure and secure it.

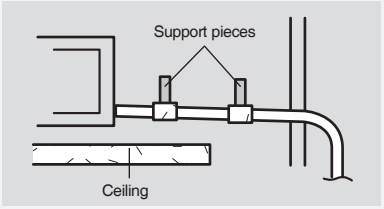
CAUTION

When not installing the drain pump

Do not give the hose and upward gradient after the connection port.
This will cause water to flow backwards when the unit is stopped, resulting in water leaks.

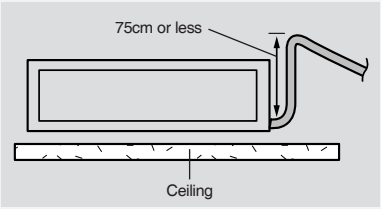


Do not apply force to the piping on the unit side when connecting the drain hose. The hose should not be allowed to hang loose from its connection to the unit. Fasten the hose to a wall, frame or other support as close to the unit as possible.



When installing the drain pump

If it is necessary to increase the height of the drain hose somewhat, the portion directly after 75cm. If it is raised higher than 75cm, there can be water leaks.



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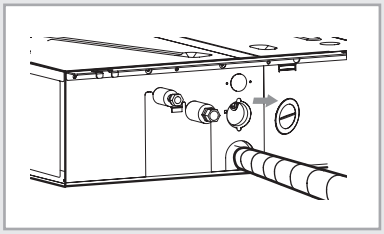
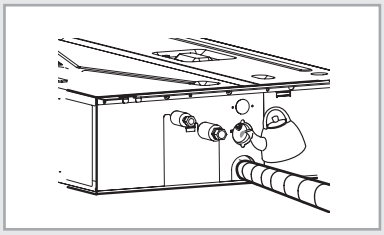
Drain Hose Installation (Continued)





Testing the drainage

Prepare a little water about 5 liters.

1 Pour water into the base pan in the indoor unit as shown in figure.

2 Confirm that the water flows out through the drain hose.

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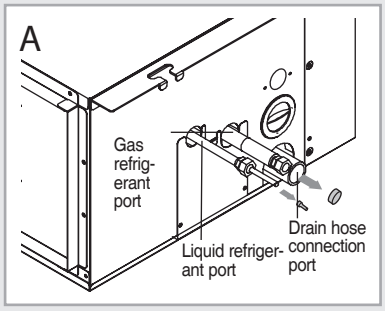
Connecting the Indoor Unit Assembly Piping

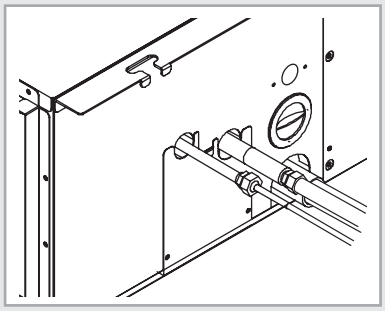
There are two refrigerant pipes of differing diameters:

- A smaller one for the liquid refrigerant
- A larger one for the gas refrigerant
- The thickness of tube should not less than 1.0mm
- The inside of copper tube must be clean & has no dust.

The connection procedure for the refrigerant pipes varies according to the exit position of the pipes from the indoor unit, as seen when facing the indoor in the "A" side.

- Liquid refrigerant port
- Gas refrigerant port
- Drain hose connection port



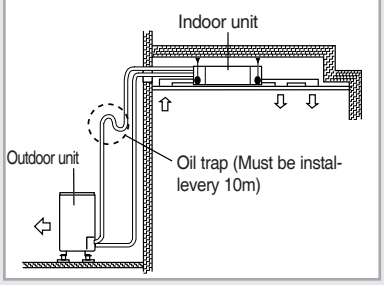


1 Remove the pinch pipe on the pipes and connect the assembly pipes to each pipe, tightening the nuts, first manually and then with a torque wrench, a spanner applying the following torque.

Outer Diameter	Torque (kgf•cm)
6.35 mm (1/4")	140~170 kgf•cm
9.52 mm (3/8")	250~280kgf•cm
12.70 mm (1/2")	380~420kgf•cm
15.88 mm (5/8")	440~480kgf•cm
19.05 mm (3/4")	990~1210kgf•cm
22.23 mm (7/8")	990~1210kgf•cm

Note ◆ If the pipes must be shortened refer to page 16.

a. When the indoor unit is above the outdoor unit



2 Must use insulator which is thick enough to cover the refrigerant tube to protect the condensate water on the outside of pipe falling onto the floor and the efficiency of the unit will be better.

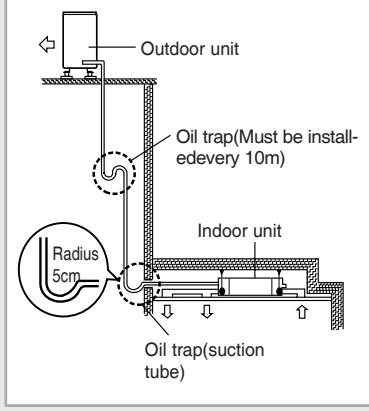
3 Cut off any excess foam insulation.

4 Be sure that there must be no crack or wave on the bended area.

5 It would be necessary to double the insulation thickness (10mm or more) to prevent condensation even on the insulator when if the installed area is warm and humid.

6 Shape an oil trap as shown in figure the oil trap must be formed every level difference of 10m.

b. When the outdoor unit is above the indoor unit



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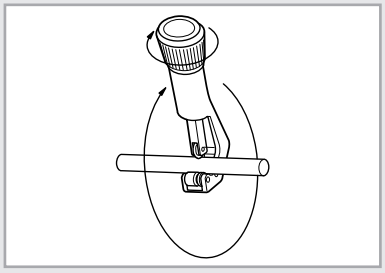
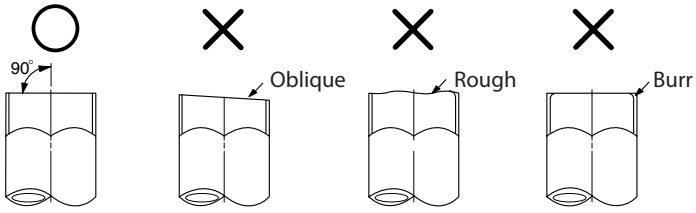
Cutting/Flaring the Pipes

Connect the pipe within 50m and cutting pieces will not be gone into the pipe as being clean to pipe section.

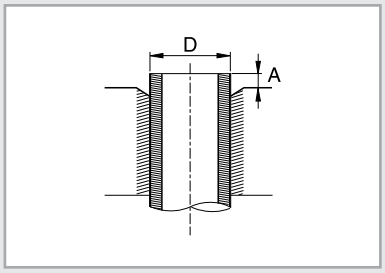
1 Make sure that you have the required tools available (pipe cutter, reamer, flaring tool and pipe holder).



2 If you wish to shorten the pipes, cut it with a pipe cutter, taking care to ensure that the cut edge remains at a 90° angle with the side of the pipe. Refer to the illustrations below for examples of edges cut correctly and incorrectly.



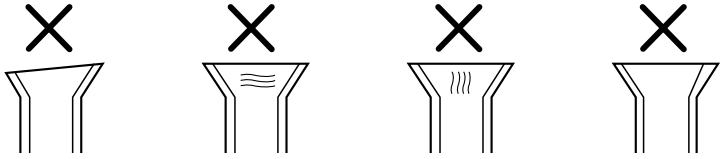
3 To prevent any gas from leaking out, remove all burrs at the cut edge of the pipe, using a reamer.

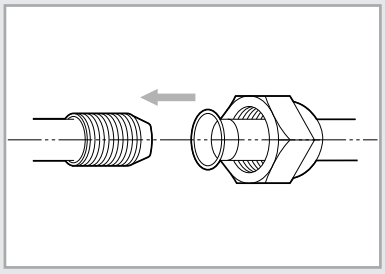


4 Slide a flare nut on to the pipe and modify the flare.

Outer Diameter (D)	Depth (A)
6.35 mm (1/4")	1.3mm
9.52 mm (3/8")	1.8mm
12.70 mm (1/2")	2.0mm
15.88 mm (5/8")	2.2mm
19.05 mm (3/4")	2.2mm
22.23 mm (7/8")	2.2mm

5 Check that the flaring is correct, referring to the illustrations below for examples of incorrect flaring.





6 Align the pipes and tighten the flare nuts first manually and then with a torque wrench, applying the following torque.

Outer Diameter	Torque (kgf•cm)
6.35 mm (1/4")	140~170 kgf•cm
9.52 mm (3/8")	250~280kgf•cm
12.70 mm (1/2")	380~420kgf•cm
15.88 mm (5/8")	440~480kgf•cm
19.05 mm (3/4")	990~1210kgf•cm
22.23 mm (7/8")	990~1210kgf•cm

CAUTION

◆ *In case of welding the pipe, you must weld with nitrogen gas blowing.*

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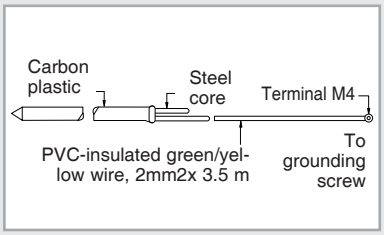
Checking Correct Grounding

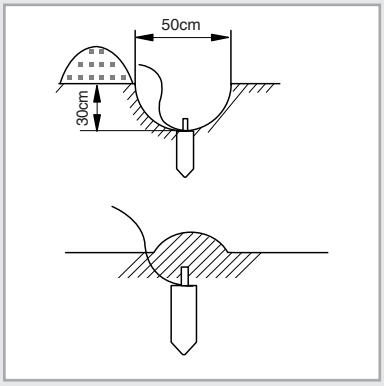
If the power distribution circuit does not have an earth or the ground does not comply with specifications, an grounding electrode must be installed.
The corresponding accessories are NOT supplied with the air conditioner.

1 Select an grounding electrode that complies with the specifications given in the illustration.



2 Determine a suitable location for the grounding electrode:
- ◆ In damp hard soil rather than loose sandy or gravel soil that has a higher grounding resistance
- ◆ Away from underground structures or facilities, such as gas pipes, water pipes, telephone lines and underground cables
- ◆ At least two metres away from a lightening conductor grounding electrode and its cable

Note ◆ The grounding wire for the telephone line cannot be used to ground the air conditioner.



3 Finish wrapping insulating tape around the rest of the pipes leading to the outdoor unit.

4 Install a green/yellow coloured grounding wire (Ø1.6 mm, section 2-mm2 or greater):
- ◆ If the grounding wire is too short, connect an extension lead, in a mechanical way and wrapping it with insulating tape (do not bury theconnection)
- ◆ Secure the grounding wire in position with staples

Note ◆ If the grounding electrode is installed in an area of heavy traffic, its wire must be connected securely.

5 Carefully check the installation, by measuring the grounding resistance with a ground resistance tester. If the resistance is above required level, drive the electrode deeper into the ground or increase the number of grounding electrodes.

6 Connect the grounding wire to the electrical component box inside of the outdoor unit.

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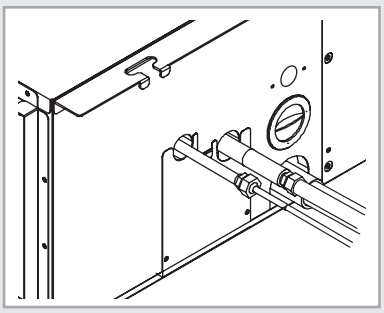
Performing Leak Tests



Leak Test

Before completing the installation (insulation of the hose and pipe), you must check that there are no gas leaks.

1	After closing both high and low stop valve of the outdoor unit, inject nitrogen gas into refrigerant pipe.
2	By using soap bubbles, check leak on flare nut connection of pipes.
3	Purge nitrogen gas after finishing leak test.

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Insulation

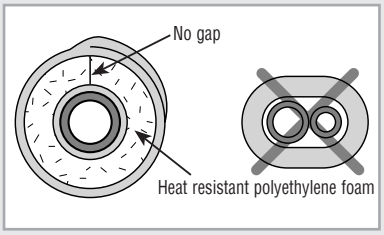
Once you have checked that there are no leaks in the system, you can insulate the piping and hose.

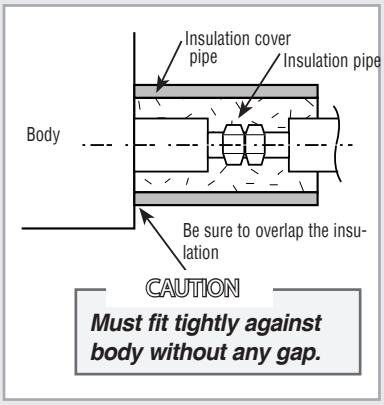
1 To avoid condensation problems, place heat-resistant polyethylene foam separately around each refrigerant pipe.

Note ◆ Always make the seam of pipes face upwards.

2 Wind insulating tape around the pipes.

3 Finish wrapping insulating tape around the rest of the pipes leading to the outdoor unit.





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Adjusting Air Flow

E. S. P(External Static Pressure) Setting for Phase Control Motor

With its phase control motor, you can adjust the indoor unit fan speed depending on the installation condition. If the external static pressure is high so that the duct becomes longer or if the external static pressure is low so that the duct becomes shorter, adjust the fan speed by referring the following table. Refer to the page 21 to set the option code.

Static Pressure(mmAq)			0	1	2	3	4	6	8
Model	Step	CMM (CFM)	Option Code for Indoor Unit						
EH052EAMC	Hi	15	0114B3 -1901CF	0114B4 -190221	0114B4 -1902F3	0114B4 -1902F6	0114B4 -1902FC	-	-
	Mid	13							
	Low	11							
EH070EAMC	Hi	20	011443 -1C019E	011443 -1C01FF	011444 -1C0271	011444 -1C02F5	011444 -1C02FB	-	-
	Mid	18							
	Low	16							
DH094EAMC	Hi	25	015431 -1E03F6	-	015433 -1E0137	-	015433 -1E01AA	015433 -1E03BE	015434 -1E02F6
	Mid	22							
	Low	19							

Note

- represents E. S. P(External Static Pressure) range of factory setting. You don't have to adjust the fan speed separately if the external static pressure of the installation place is in . When it is out of , input the appropriate option code.
- If you input the inappropriate option code, error may occur or the air conditioner is out of order. The option code must be inputted correctly by the installation specialist or service agent.

Range of static pressure (Factory preset)

Model	External static pressure(mmAq)		
	Min.	Normal	Max.
EH052/070EAMC	0	2	4
DH094EAMC	4	6	8

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Setting Up the Mode Option

Setting Option Setup Method

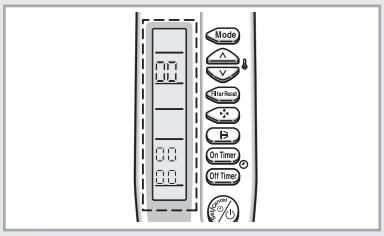
For example) Option Code : 085115-1d2340

1 Prepare of the Option Setup mode.

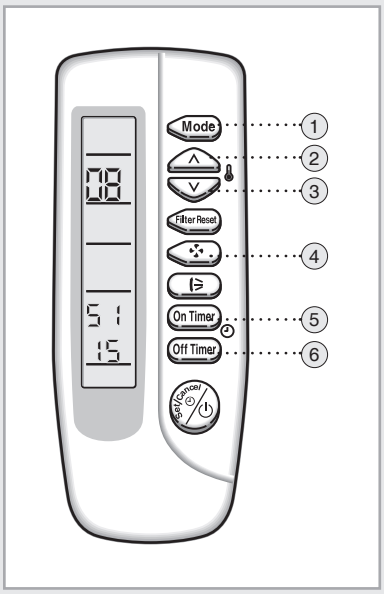
a. Take out the batteries of remote control.

b. Press the button simultaneously and insert the battery again.

c. Make sure the remote control display shows as 00.



2 Enter the Option Setup mode and select your option according to the following procedure.



✳ Setting is not required if you want to input 0.0 is displayed by default.

① The default value is 00 Otherwise, push the Mode button to 0.

◆ Every time you press the button, the display panel reads 0 or repeatedly.

② Press the button to set the display panel to 8.

◆ Every time you press the button, the display panel reads 0 ➡ 1 ➡ 2 3 ➡ ··· 9 ➡ A ➡ b ➡ c ➡ d ➡ repeatedly.

③ Press the button to set the display panel to 5.

◆ Every time you press the button, the display panel reads 0 ➡ 1 ➡ 2 3 ➡ ··· 9 ➡ A ➡ b ➡ c ➡ d ➡ repeatedly.

④ Press the button to set the display panel to 1.

◆ Every time you press the button, the display panel reads 0 ➡ 1 ➡ 2 3 ➡ ··· 9 ➡ A ➡ b ➡ c ➡ d ➡ repeatedly.

⑤ Press the On Timer button to set the display panel to 1.

◆ Every time you press the button, the display panel reads 0 ➡ 1 ➡ 2 3 ➡ ··· 9 ➡ A ➡ b ➡ c ➡ d ➡ repeatedly.

⑥ Press the Off Timer button to set the display panel to 5.

◆ Every time you press the button, the display panel reads 0 ➡ 1 ➡ 2 3 ➡ ··· 9 ➡ A ➡ b ➡ c ➡ d ➡ repeatedly.

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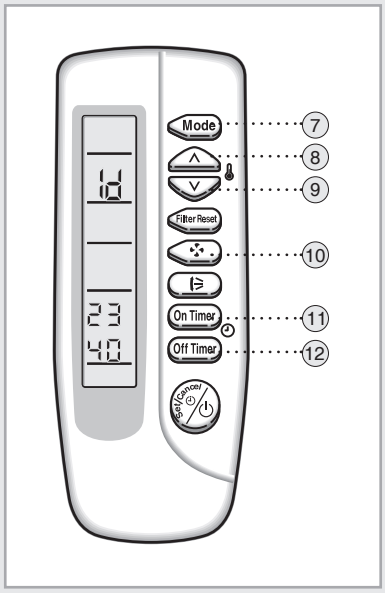
Setting Up the Mode Option (Continued)



✳ Setting is not required if you want to input 0.0 is displayed by default.

7 Press the Mode button, then the default value is 10.

8 Press the ∧ button to set the display panel to d.

◆ Every time you press the button, the display panel reads 0 ➡ 1 ➡ 2 3 ➡ ··· 9 ➡ A ➡ b ➡ c ➡ d ➡ repeatedly.

9 Press the ∨ button to set the display panel to 2.

◆ Every time you press the button, the display panel reads 0 ➡ 1 ➡ 2 3 ➡ ··· 9 ➡ A ➡ b ➡ c ➡ d ➡ repeatedly.

10 Press the ✣ button to set the display panel to 3.

◆ Every time you press the button, the display panel reads 0 ➡ 1 ➡ 2 3 ➡ ··· 9 ➡ A ➡ b ➡ c ➡ d ➡ repeatedly.

11 Press the On Timer button to set the display panel to 4.

◆ Every time you press the button, the display panel reads 0 ➡ 1 ➡ 2 3 ➡ ··· 9 ➡ A ➡ b ➡ c ➡ d ➡ repeatedly.

12 Press the Off Timer button to set the display panel to 0.

◆ Every time you press the button, the display panel reads 0 ➡ 1 ➡ 2 3 ➡ ··· 9 ➡ A ➡ b ➡ c ➡ d ➡ repeatedly.

3 Check you made right selections upon completion of the selection.

a. Press the Mode button once to check the former part of option code you inputted.

◆ The display part shows 08 / 51 / 15.

b. Press the Mode button once more to check the latter part of option code you inputted.

◆ The display part shows 1d / 23 / 40.

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4 Press the button.

◆ When you press the button towards the indoor unit, the sound 'Ding' or 'Diriring' is heard and the power indicator of the display flashes at the same time. Then the option code setting is completed. (If the sound is not heard, press the button again.)

5 Check the air conditioner operates normally.

a. Remove the battery from the remote control.

b. Insert the battery into the remote control again.

c. Press the towards the indoor unit.

Note

◆ If all indicators of the indoor unit are flashing, plug out the power plug and plug it in again. Then press the button.

◆ If the air conditioner does not operate normally or all lamps indicators flash, check that the correct option code is set up.

Option items

Remote Control / Model	SEG1	SEG2	SEG3	SEG4	SEG5	SEG6	SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
EH052EAMC	**0**	**1**	**1**	**4**	**B**	**4**	**1**	**9**	**0**	**2**	**F**	**3**
EH070EAMC	**0**	**1**	**1**	**4**	**4**	**4**	**1**	**C**	**0**	**2**	**7**	**1**
DH094EAMC	**0**	**1**	**5**	**4**	**3**	**3**	**1**	**E**	**0**	**3**	**B**	**E**

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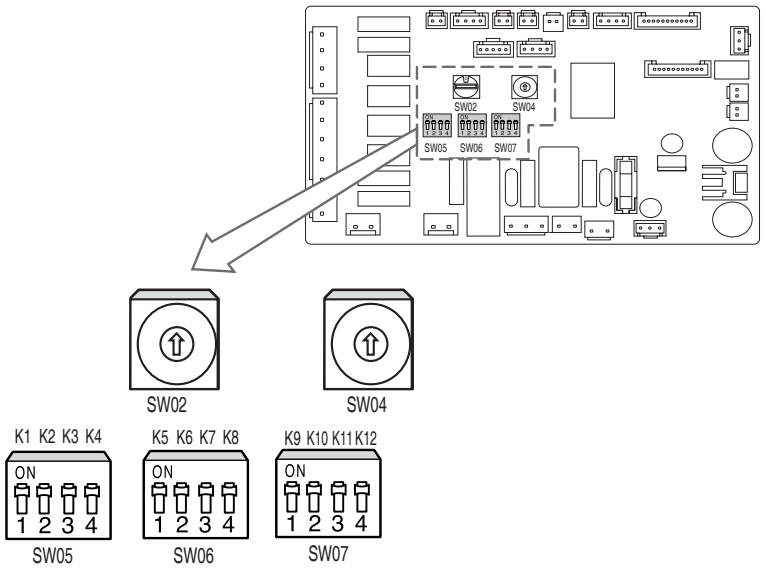
Assigning Address to Indoor Unit

1 Before installing the indoor unit, assign an address to the indoor unitaccording to the air conditioning system plan..

2 The address of the indoor unit is assigned by adjusting MAIN(SW02) andRMC(SW04) rotary switches.



3 It is required to set the RMC address if you install the wired remote controllerand/or the centralized controller.

4 If you install optional accessories such as the wired remote controller, centralizedcontroller, etc. see an appropriate installation manual.

5 If an optional accessory is not installed, you do not have to set the RMCaddress. However, adjust K1 and K2 switches of the SW05 DIPswitch to “ON”position in this case.

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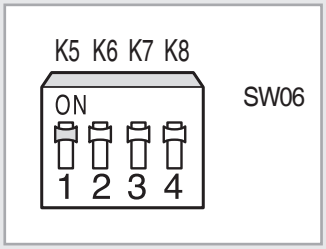
Compensation for lost temperature in heating operation

◆ Reduces the difference between an actual room temperature and a sensed temperature by the air conditioner when heating.

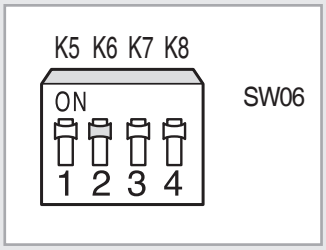
Switch No.	Switch ON	Switch OFF
K5	2°C compensation	5°C compensation



Adjusting filter cleaning cycle

◆ You can adjust the cycle for filter sign indicator.

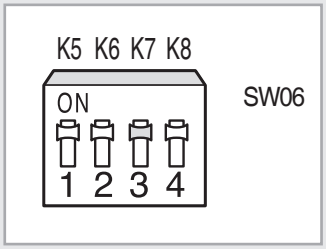
Switch No.	Switch ON	Switch OFF
K6	1000 hours	2000 hours



Hot water heater

◆ You must adjust the K7 when you install the hot water heater.

Switch No.	Switch ON	Switch OFF
K7	No use of hot water heater	Use of hot water heater



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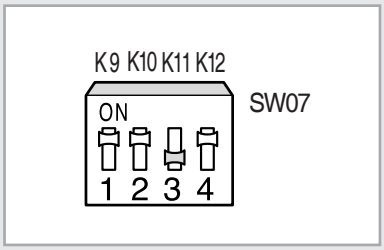


External Control

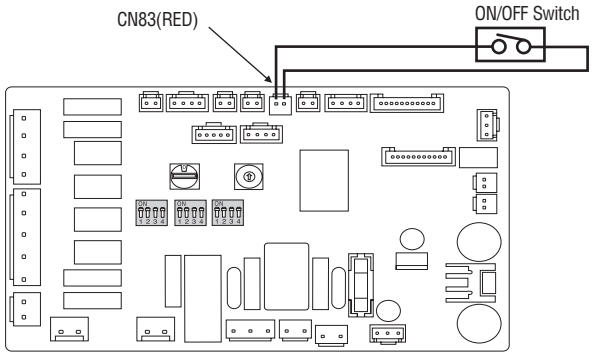
◆ You must adjust the K11 when you use external control.

Switch No.	Switch ON	Switch OFF
K11	No use of external control	Use of external control

◆ You can use external control when the K11 switch is turned off.

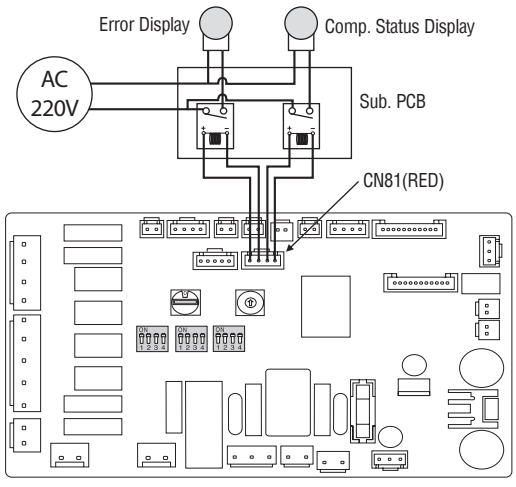
Operation ON/OFF Function

Connector No.	SHORT	OPEN
CN83(RED)	Operation ON	Operation OFF



Operation State Display

Connector No.	Function
PIN #1 and #2 of CN81(RED)	+12V Out if any error occurs
PIN #3 and #4 of CN81(RED)	+12V Out when the compressor is operating



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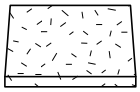
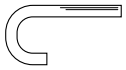
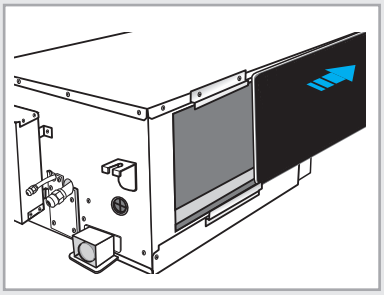
Drain Pump Installation (Optional)

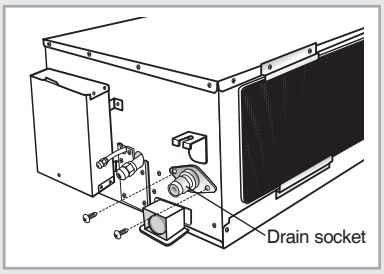
Accessories

Drain Pump and FloatSwitch(1)	M4 X 12 TappedScrew (4)	Cable-Tie (3)	Insulation Drain (2)	Drain Hose (1)
				

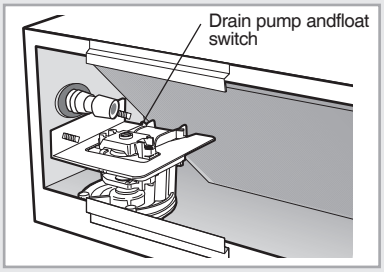
1 Remove the air filter.



2 Assemble the drain socket as seen in the picture after removing the rubbercap.

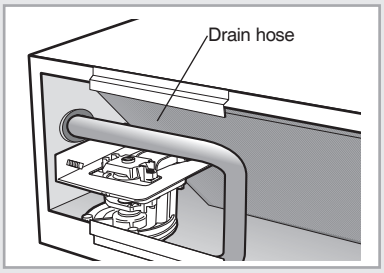


3 Assemble the float switch with the drain pump.



4 Connect the drain hose.

Note Attach the drain hose tightly with the cable tie or a bondingagent so that it does not get removed or water does not drain.



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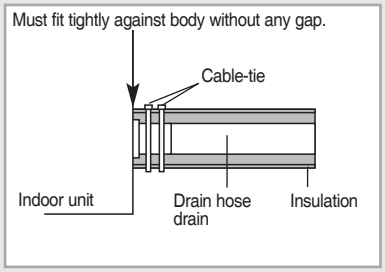
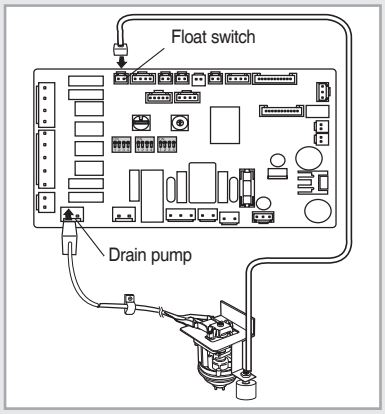
Drain Pump Installation (optional) (Continued)



5 IInsert the flexible hose into the drain socket until it clicks.

Note

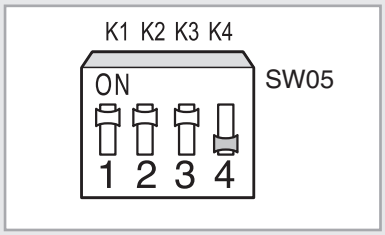
- Check if water does not drain.
- Insulate the drain hose so that frost does not form.



6 Connect the cable to the electrical component box as shown at the figure.

Note

- Connect the drain pump cable to yellow terminal(CN74)and the float switch to black terminal(CN51).



7 Adjust K4 DIPswitch(SW05) to the “OFF” position.

Switch No.	Switch Position	Using Drain Pump
K4	ON	X
	OFF	O

Note

- Wrap the drain tube outlet on the right and left side ofthe indoor unit with an insulating materials.

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Detection of errors

- If an error occurs during the operation, one or more LED flickers and the operation is stopped except the LED.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.

LED Display on the receiver & display unit

LED Display

Abnormal conditions	Indicators					Remarks
	Concealed Type					
	Blue	Red				
	Standard Type					
Power reset	◑	X	X	X	X	
Error of temperature sensor in the indoor unitt (Open/Short)	X	X	◑	X	X	
Error of heat exchanger sensorin the indoor unit	◑	X	◑	X	X	
Error of the outdoor temperature sensor Error of the condensor temperature sensor- Error of the discharge temperature sensor	◑	X	X	◑	X	
1. No communication for 2 minutesbetween indoor units (Communication error for more than 2 minutes) 2. Indoor unit receiving the communication-error from outdoor unit 3. Outdoor unit tracking 3 minutes error 4. When sending the communication error-from the outdoor unit, the mismatchingof the communication numbers andinstalled numbers after completion oftracking (Communication error for more than 2 minutes)	X	X	◑	◑	X	1. Indoor unit error (Display is unrelated with operation) 2. Outdoor unit error (Display is unrelated with operation)

● On ◑ Flickering X Off

◆ If you turn off the air conditioner when the LED is flickering, the LED is also turned off.

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LED Display

Abnormal conditions	Indicators					Remarks
	Concealed Type					
	Blue	Red				
	Standard Type					
Communication error between indoor units	◑	X	X	X	◑	
1. Error of electronic expansion valve close 2. Error of electronic expansion valve open 3. 2'nd detection of high temperature cond 4. 2'nd detection of high temperaturedis-charge 5. Error of reverse phase6. Compressor down due to 6'th detectionof freezing	X	X	◑	◑	◑	
Detection of the float switch	X	X	◑	◑	◑	
Error of setting option switches for optiona-laccessories	X	X	◑	X	◑	
EEPROM error	◑	X	◑	◑	X	
EEPROM option error	◑	◑	◑	◑	◑	

● On ◑ Flickering X Off

◆ If you turn off the air conditioner when the LED is flickering, the LED is also turned off.

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Wired remote controller

◆ If an error occurs, TEST is displayed on the wired remote controller.
If you would like to see an error code, press the Test button.

Display	Explanation	Remark
416	Compressor down due to protection control of the discharge-temperature sensor	Error about protection control of the outdoor unit
450	Control due to the condenser temperature sensor when coolingmode	
454	Error of the low pressure switch (Protection control)	
425	Reverse phase error (Protection control)	
551	In removing frost	
221	Error of the outdoor temperature sensor (Open/Short)	Error about the outdoor unitsen-sor (Open/Short)Detection dur-ing the operation of the indoor unit(sensing and sending errors-into the communication data)
230	Error of condensor temperature sensor (Open/Short)	
251	Error of discharge temperature sensor (Open/Short)	
201	-System down caused by communication error after comple-tionof tracking- Mismatching of the indoor unit numbers set with those communication after completion of 5 times tracking	Communication and theindoor unit errors
121	Error of temperature sensor in the indoor unit (Open/Short)	Self-diagnosis of theindoor and outdoor unit
122	Error of the heat exchanger sensor in the indoor unit (Open/Short)	
419	Error of electronic expansion valve open in the outdoor unit(when it is detected more than once)	
422	Error of electronic expansion valve close in the outdoor unit(when it is detected more than once)	
601	Error of communication between the indoor unit and the wire-dremote controller	Wired remote controllererrors
602	Master wired remote controller□Slave wired remote controller	
606	COM1/COM2 Cross-installed error	
8EA	Error of setting option for wired remote controller COM2	

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Outdoor unit

◆ If an error occurs during the operation, it is displayed on the outdoor unit PCB.

Display	Explanation	Remark
Er↔P0	High temperature of Discharge (Protection control)	Error about protectioncontrol of outdoor unit
Er↔P1	High temperature of outdoor heat exchanger (Protection control)	
Er↔P3	Low pressure of outdoor (Protection control)	
Er↔P5	COMP DOWN to protect being frozen	
Er↔P6	Instant power supply failure (Power on/ off)	
Er↔P9	In removing frost	
Er↔t1	Error of OUTTEMPsensor (OPEN/SHORT)	Errors about outdoor unitsensor (OPEN/SHORT)Detection during the operation of indoor unit(Sensing and sending errorsinto the communication data)
Er↔t2	Error of temperature sensor in outdoor heat exchanger (OPEN/SHORT)	
Er↔t3	Error of Discharge TEMPsensor (OPEN/SHORT)	
Er↔E1	System Down caused by communication error aftercompletion of tracking	Communication and indoorunit errors
Er↔E2	Mismatching of the indoor unit numbers set with thosecommunicated after completion of tracking	
Er↔E3	Error of float switch in indoor unit	Self-diagnosis of indoorand outdoor unit (x:indoorunit address)
Er↔E5	Error of setting option switches for optional accessories	
Er↔9 x	OPEN/SHORTerror of room sensor in indoor unit	
Er↔r x	OPEN/SHORTerror of eva in sensor in indoor unit	
Er↔u x	Erreur du démarrage du ventilateur	Displays of operating status
tU Flicker	(Below -5°C when cooling (Outdoor temperature)	
t0 Flicker	Over 30°C when heating (Outdoor temperature)	
K1, K2, K3, K4, K5 Flicker		

The order of priority : E1 → E2 → E5 → P0 → P1 → P3 → P5 → P9 → P6→ t1 → t2 → t3 →tu →t0
E3 → qx → rx → vx → K1, K2, K3, K4, K5

- In case that the same error displays from multi-indoor units, the one having the fast eraddress has the priority.

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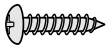
Parts List

Receiver & Display Unit Accessories

Concealed Type

◆ Receiver & display unit

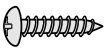
Receiver & display unit	STS 2S-2x10 tapped screw	2S-4x12 tapped screw	Owner's instructions	Installation manual
1	4	2	1	1
				

◆ Wire kit

Wire kit
1

Standard Type

◆ Receiver & display unit

Wireless remote controller	M4x16 tapped screw	Cable-tie	Cable clamp	Owner's instructions	Installation manual
1	7	2	5	1	1
					

◆ Wire kit

Wire kit
1

Wireless Remote Controller Accessories

Wireless remote controller	Battery	Remote control holder	STS 2S-2x10 tapped screw	Owner's instructions	Installation manual
1	2	1	2	1	1

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Parts list (Continued)

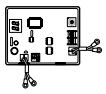
Centralized Controller Accessories

Centralized controller	Cable-tie	Cable clamp	M4x16 tapped screw	Owner's instructions	Installation manual
1	2	5	7	1	1

Function Controller Accessories

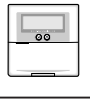
Function controller	Cable-tie	Cable clamp	M4x16 tapped screw	Owner's instructions	Installation manual
1	2	6	7	1	1

Transmitter Accessories

Transmitter	Transmitter power cable	Transmitter communication cable	Installation manual
1	1	1	1
			

Note ◆ If you would like to install the centralized controller, you must install the transmitter in the outdoor unit.

7-day Scheduler Accessories

7-day Scheduler	Cable-tie	Cable clamp	M4x16 tapped screw	Owner's instructions	Installation manual
1	2	2	4	1	1
					

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Memo

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